Integrating ISMS Core Functions in Waste Retrieval to Achieve Maximum Results

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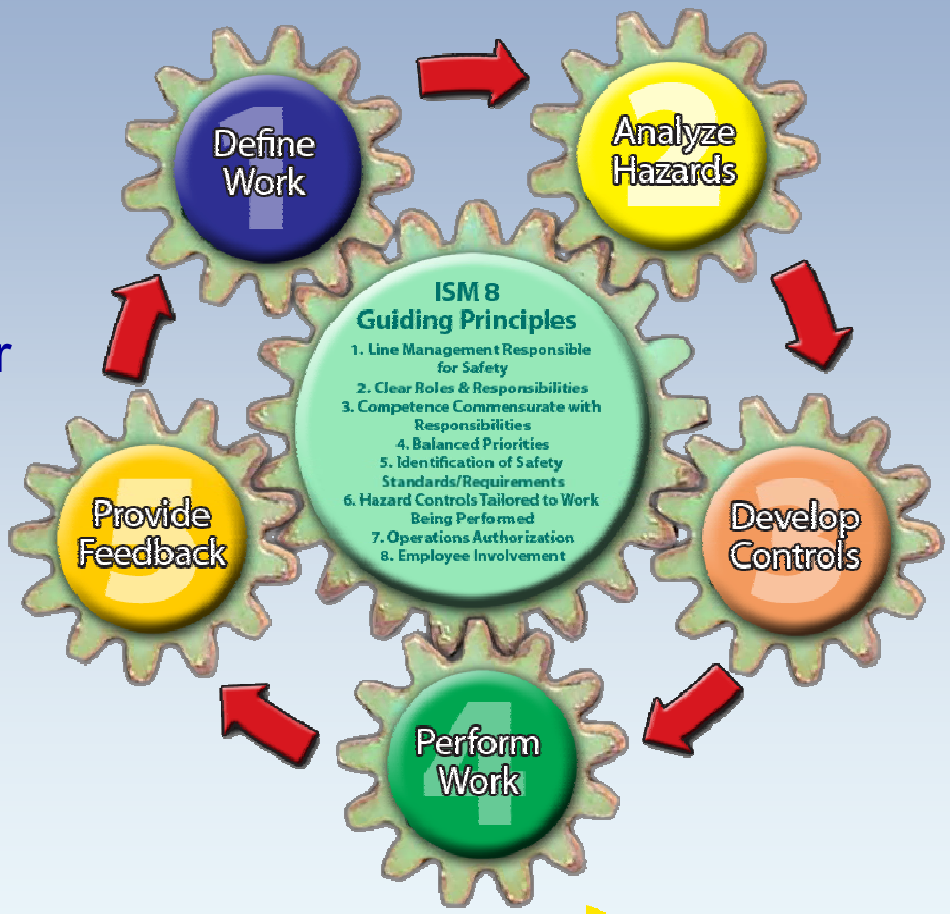

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TSA-RE

The Transuranic Storage Area (TSA) consists of approximately 7.5 acres. The waste was stored outside for approximately 20 years until the Transuranic Storage Area- Retrieval Enclosure (TSA-RE) was built.

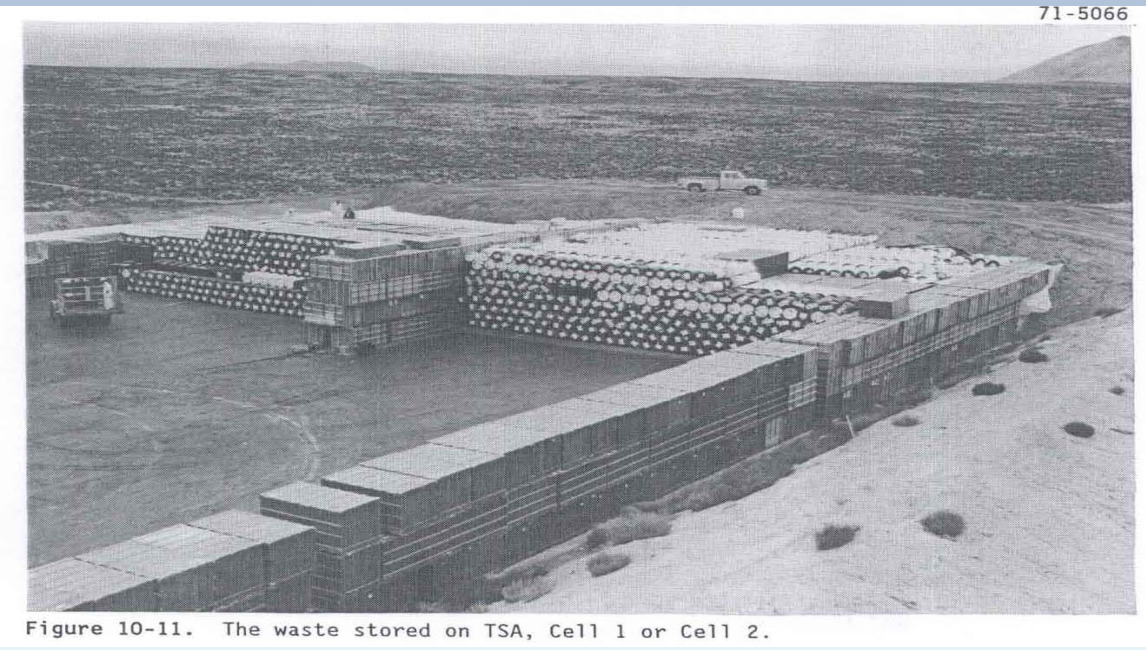

Figure 10-11. The waste stored on TSA, Cell 1 or Cell 2.

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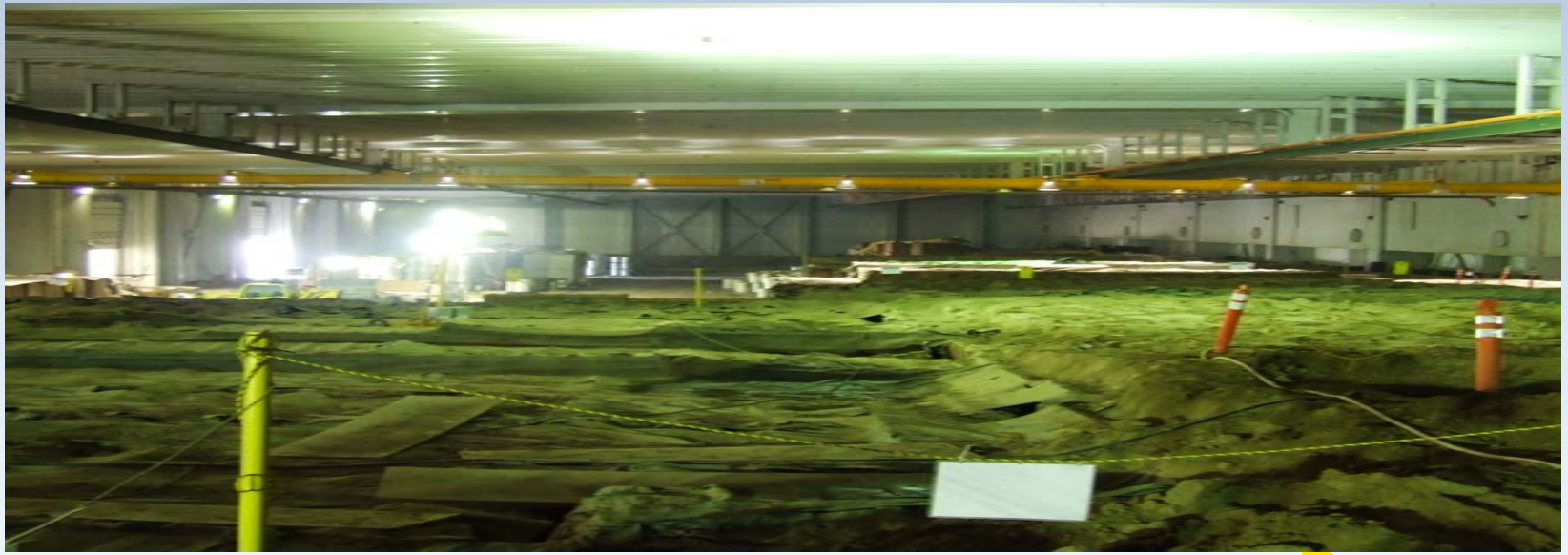
Define The Scope of Work

- Remove the soil, tarp and plywood covering the waste.
- Retrieve the Waste Boxes and Drums.



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Analyze the Hazards

- Numerous hazards identified and analyzed in the retrieval area through daily operations, observations, historical information and Job Hazard Assessments include some of the following.
  - Soil Subsidence Concerns
  - Unstable Waste configurations
  - Horizontal Waste Configuration
  - Bulged Containers
  - Container Integrity
  - Radiological Concerns

Soil Removal

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Soil Removal

Soil removal is accomplished by using dirt excavation equipment ensuring enough soil remains between the excavator and the waste to avoid damage to the waste containers and/or soil subsidence .

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Drum and Box Retrieval Face

Once soil is removed, the retrieval face is kept in a stair step configuration to eliminate excess weight on the waste containers and eliminate the possibility of the waste containers tipping over.

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Mitigating the Hazards

- Mock Ups
  - Horizontal retrieval fixtures
  - Enhanced Drum Handling fixtures
  - Drum Picking Attachment
  - Box Retrieval From Known High Contamination Area.

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Mitigating The Hazards

Hazard — Horizontal and bulged drums

Mitigation — Procured and tested handling and lift fixtures

Result

- Improved worker safety
- Improved drum handling operations

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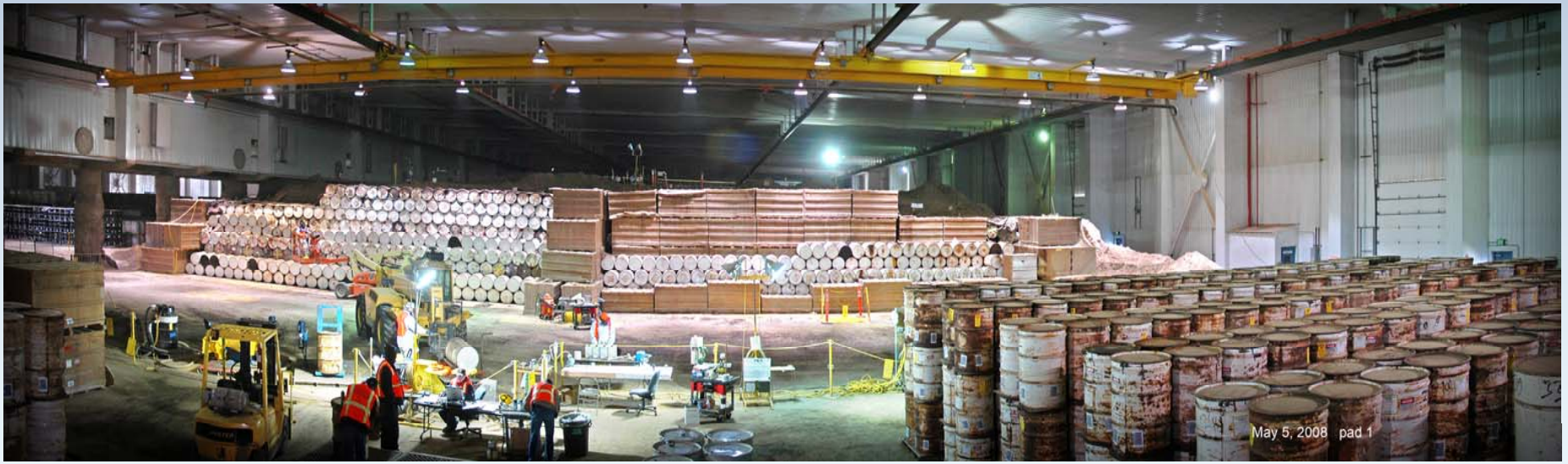
Perform the Work

Operators utilize Rolling Stock, Mechanical Equipment, Radiological and Industrial Safety/ Industrial Health Instrumentation and misc. hand tools to accomplish soil removal and daily waste retrieval activities.



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Mitigating Hazards Through Continuous Improvement

Contamination on the exterior of the boxes

1. Started by using shrink wrap and tape
   - Time consuming and material costs
   - Ergonomic concerns
2. Went to a one piece slip on cover
   - Saved time
   - Reduced ergonomic concerns
3. Reviewing using paint versus wrappings
   - Save time
   - Reduce waste

Provide Feedback

- Engagement and ownership at ALL levels
- Mock-ups
- Walk downs and discussions at ALL levels with all groups.
  - All disciplines and All Levels
- Lessons learned
- Post Job briefings

Summary

Our Mantra is
"Safety & Compliance Equals Production"

Application of ISMS and Continuous Improvement has contributed to increased retrieval rates thus increasing feed for characterization the treatment facility and shipping.

- Last six months of 2007 we retrieved 3,019 m3
- First six months of 2008 we retrieved 9,222 m3

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